West Virginia Department of Environmental Protection

Austin Caperton
Cabinet Secretary

Title V Operating Permit Revision

For Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Action Number: MM01 **SIC:** 2493
Name of Permittee: Weyerhaeuser NR Company
Facility Name/Location: Sutton OSB Mill
County: Braxton
Permittee Mailing Address: 3601 Gauley Turnpike, Heaters, WV 26627

Description of Permit Revision: This Minor Modification is to update the language of the permit to reflect the removal of the two Regenerative Catalytic Oxidizers (RCOs) by removing reference to the RCOs, removing language dependent upon the RCOs, and updating the Emission Units table. The two RCOs were replaced with a biological oxidation scrubber, or biofilter scrubber, under Permit R13-1761I and removed under Permit R13-1761J.

Title V Permit Information:
Permit Number: R30-00700016-2018
Issued Date: July 23, 2018
Effective Date: August 6, 2018
Expiration Date: July 23, 2023

Directions To Facility: Exit I-79 at the Flatwoods exit, then proceed north on Route 4/US 19 approximately 3.2 miles. The facility entrance is on the left.

THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.VA. CODE §§ 22-5-1 ET SEQ.) AND 45CSR30 - "REQUIREMENTS FOR OPERATING PERMITS." THE PERMITTEE IDENTIFIED AT THE FACILITY ABOVE IS AUTHORIZED TO OPERATE THE STATIONARY SOURCES OF AIR POLLUTANTS IDENTIFIED HEREIN IN ACCORDANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

Laura M. Crowder
Acting Director, Division of Air Quality

May 7, 2019
Date Issued

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
3800-00-10	10	Energy Cell No. 1 - Idle Run(1)	1996	<30 MMBTU/hr	Multi-Clone No.1 3820-00-10
3816-00-11	21 23	Energy Cell No. 1 Auxiliary Burner – Normal Run(1)	1996	29 MMBTU/hr	Wet ESP No. 1 4110-00-10 ~~RCO No. 1 4440-00-10~~ Biofilter 4800-00-10
3800-00-10	21 23	Energy Cell No. 1 – Normal Run(1)	1996	175 MMBTU/hr	
3916-00-11	11	Energy Cell No. 2 Auxiliary Burner – Idle Run(1)	1996	29 MMBTU/hr	Multi-Clone No.2 3920-00-10
3900-00-10	11	Energy Cell No. 2 - Idle Run(1)	1996	< 30 MMBTU/hr	Multi-Clone No.2 3920-00-10
3916-00-11	21 23	Energy Cell No. 2 Auxiliary Burner – Normal Run(1)	1996	29 MMBTU/hr	Wet ESP No. 2 4120-00-10 ~~RCO No. 2 4460-00-10~~ Biofilter 4800-00-10
3900-00-10	21 23	Energy Cell No. 2 – Normal Run(1)	1996	175 MMBTU/hr	
3130-00-11	21 23	Auxiliary Burner – Dryer No. 1	1996	55 MMBTU/hr	Wet ESP No. 1 4110-00-10 ~~RCO No. 1 4440-00-10~~ Biofilter 4800-00-10
3230-00-11	21 23	Auxiliary Burner – Dryer No. 2	1996	55 MMBTU/hr	
3330-00-11	21 23	Auxiliary Burner – Dryer No. 3	1996	55 MMBTU/hr	Wet ESP No.2 4120-00-10 ~~RCO No. 2 4460-00-10~~ Biofilter 4800-00-10
3430-00-11	21 23	Auxiliary Burner – Dryer No. 4	1996	55 MMBTU/hr	
4700-00-10	21 23	OSB Press Vent Exhaust	1996	60.4 Ton/hr	Wet ESP No. 1 4110-00-10 ~~RCO No. 1 4440-00-10~~ Wet ESP No. 2 4120-00-10 ~~RCO No. 2 4460-00-10~~ Biofilter 4800-00-10
4700-00-10	24	OSB Press Vent Exhaust (Bypass Mode)	1996	60.4 Ton/hr	None
27S	27	Emergency Diesel Generator	1996	1030 hp	None
31S	31	Liquid Phenolic Resin Tank No. 1	1996	15,000 Gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
32S	32	Liquid Phenolic Resin Tank No. 2	1996	15,000 Gallons	None
33S	33	Liquid Phenolic Resin Tank No. 3	1996	15,000 Gallons	None
34S	34	Liquid Phenolic Resin Tank No. 4	1996	15,000 Gallons	None
46S	46	Liquid Phenolic Resin Tank No. 5	2005	15,000 Gallons	None
47S	47	Liquid Phenolic Resin Tank No. 6	2005	15,000 Gallons	None
35S	35	MDI Tank No. 1	1996	15,000 Gallons	None
36S	36	MDI Tank No. 2	1996	15,000 Gallons	None
37S	37	Wax Tank No. 1	1996	15,000 Gallons	None
38S	38	Wax Tank No. 2	1996	15,000 Gallons	None
40S and 41S	40 and 41	Paint Booth No. 1	2002	26 Gal./hr	Filters
42S and 43S	42 and 43	Paint Booth No. 2	2002	26 Gal./hr	Filters
44S and 45S	44 and 45	Paint Booth No. 3	2002	26 Gal./hr	Filters

(1) Energy Cells are authorized to operate in the following scenarios: During "normal operations," gases will be vented through Wet ESPs and ~~RCO or~~ Biofilter and out Emission Point ~~21 or~~ 23~~, respectively~~. During RCDME, gases will be vented through Wet ESPs and out Emission Point 21. During "Idle Run Condition," gases will be vented through Multiclones and out Emission Points 10 and 11. During "Energy Cell Only Mode," gases will be vented through Wet ESPs and out Emission Point 21

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1761J~~I~~	October 18, 2018~~August 5, 2016~~

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31. **[45CSR§30-5.1.c.3.E.]**

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air Section (3ED21)
~~Associate Director~~
~~Office of Air Enforcement and Compliance Assistance (3AP20)~~
~~U. S. Environmental Protection Agency~~
~~Region III~~
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
10[2]	Energy Cell No. 1 (3800-00-10) (Idle-Run Mode Only) Auxiliary Burners (3816-00-11) (Idle-Run Mode Only)	Multi-Clone (3820-00-10)	PM_{10}	6.8	9.5
			SO_2	1.0	1.4
			CO	6.0	8.4
			VOC	9.1	12.8
			NO_x	8.0	11.2
			Benzene	0.45	0.63
			Hydrochloric Acid	0.22	0.31
			Lead Compounds	0.01	0.01
			Methylene Chloride	0.07	0.10
			Napthalene	0.43	0.60
			POM	0.43	0.60
			Total HAP	2.71	3.79
11[2]	Energy Cell No. 2 (3900-00-10) (Idle-Run Mode) Auxiliary Burners (3916-00-11) (Idle-Run Mode)	Multi-Clone (3920-00-10)	$PM_{2.5}/PM_{10}/PM$	34.68	N/A[3]
			SO_2	12.26	
			CO	40.66	
			VOC	59.09	
			NO_x	88.23	
			Acetaldehyde	2.40	
			Acrolein	0.93	
			Formaldehyde	4.55	
			Lead Compounds	0.01	
			Methanol	10.49	
			Phenol	0.00	
			Proprionaldehyde	1.00	
			Total HAP	26.21	
21[3]	Energy Cell No. 1 (3800-00-10) Energy Cell No. 2 (3900-00-10) Dryer No. 1 (3130-00-11) Dryer No. 2 (3230-00-11) Dryer No. 3 (3330-00-11) Dryer No. 4 (3430-00-11) OSB Press (4700-00-10) Auxiliary Burners (3816-00-11) Auxiliary Burners (3916-00-11)	Wet ESP No. 1 (4110-00-10) Wet ESP No. 2 (4210-00-10)			
~~21[4]~~	~~Energy Cell No. 1 (3800-00-10)~~ ~~Energy Cell No. 2 (3900-00-10)~~ ~~Dryer No. 1 (3130-00-11)~~ ~~Dryer No. 2 (3230-00-11)~~ ~~Dryer No. 3 (3330-00-11)~~ ~~Dryer No. 4 (3430-00-11)~~ ~~OSB Press (4700-00-10)~~ ~~Auxiliary Burners (3816-00-11)~~ ~~Auxiliary Burners (3916-00-11)~~	~~Wet ESP No. 1 (4110-00-10)~~ ~~Wet ESP No. 2 (4210-00-10)~~ ~~Regenerative Catalytic Oxidizer Nos. 1 and 2 (4440-00-10 and 4460-00-10)~~	~~$PM_{2.5}/PM_{10}/PM$~~	~~34.68~~	~~N/A[5]~~
			~~SO_2~~	~~12.26~~	
			~~CO~~	~~44.66~~	
			~~VOC~~	~~16.84~~	
			~~NO_x~~	~~88.23~~	
			~~Acetaldehyde~~	~~0.73~~	
			~~Acrolein~~	~~0.28~~	
			~~Formaldehyde~~	~~4.45~~	
			~~Lead Compounds~~	~~0.01~~	
			~~Methanol~~	~~3.21~~	
			~~Phenol~~	~~0.00~~	
			~~Proprionaldehyde~~	~~0.31~~	
			~~Total HAP~~	~~11.34~~	

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
23~~(6)~~(4)	Energy Cell No. 1 (3800-00-10) Energy Cell No. 2 (3900-00-10) Dryer No. 1 (3130-00-11) Dryer No. 2 (3230-00-11) Dryer No. 3 (3330-00-11) Dryer No. 4 (3430-00-11) OSB Press (4700-00-10) Auxiliary Burners (3816-00-11) Auxiliary Burners (3916-00-11)	Wet ESP No. 1 (4110-00-10) Wet ESP No. 2 (4210-00-10) Biofilter (4800-00-10)	$PM_{2.5}/PM_{10}/PM$	34.68	79.40
			SO_2	12.26	17.90
			CO	44.66	225.40
			VOC	48.60	118.40
			NO_x	88.23	246.55
			Acetaldehyde	2.40	4.89
			Acrolein	0.93	1.21
			Cumene	4.74	5.67
			Formaldehyde	4.56	10.32
			Lead Compounds	0.01	0.03
			Methanol	1.05	3.15
			Phenol	0.00	0.00
			Propionaldehyde	1.00	0.83
			Xylenes	0.45	1.96
			Total HAP	17.01	33.16
24	OSB Press (4700-00-10) (Bypass Mode)	N/A	PM_{10}	2.5	0.48
			CO	9.0	2.95
			VOC	36.0	7.86
			Acetaldehyde	1.94	0.33
			Chlorine	1.14	0.09
			Cumene	12.0	1.10
			Formaldehyde	6.00	1.49
			Methanol	15.5	4.88
			MDI	0.03	0.01
			Phenol	0.52	0.06
			Total HAP	37.3	7.96
27	Emergency diesel-fired generator	N/A	PM_{10}	0.44	0.03
			SO_2	3.1	0.16
			CO	4.2	0.21
			VOC	0.50	0.03
			NO_x	18.2	0.92
31	Liquid Phenolic Resin Tank No. 1	N/A	VOC	---	0.01
32	Liquid Phenolic Resin Tank No. 2	N/A			
33	Liquid Phenolic Resin Tank No. 3	N/A			
34	Liquid Phenolic Resin Tank No. 4	N/A			
35	MDI Tank No. 1	N/A	VOC	---	---
36	MDI Tank No. 2	N/A			
37	Wax Tank No. 1	N/A	VOC	---	0.01
38	Wax Tank No. 2	N/A			
40 & 41	Paint Booth No. 1	Filters	PM_{10}	0.39	1.71
42 & 43	Paint Booth No. 2	Filters			
44 & 45	Paint Booth No. 3	Filters			
46	Liquid Phenolic Resin Tank No. 5	N/A	VOC	---	0.01
47	Liquid Phenolic Resin Tank No. 6	N/A			

(1) The VOC emissions from emission points 1-11 are based on estimations using industry averages and not testing data.
(2) These emission limits are applicable only when the Energy Cells are in "Idle Run Mode" as defined under 4.1.3. As these emissions are less than those generated during normal operation or RCDME, they do not contribute to the facility's PTE.
(3) These emission limits are applicable only when the mill is operating under the RCDME as outlined under 4.1.3. Emissions generated during the RCDME contribute toward the annual emission limits given under footnote (6) as applicable. Although the RCDME Emissions are contributed toward the limits under Emission Point 23 they are actually vented through Emission Point 21.

~~(4) The hourly emission limits are applicable when the RCOs are being utilized during all times of "normal operation" and during times of "Energy Cell Only Mode" as defined under 4.1.3. The annual emission limits also include contributions made during RCDME events.~~

~~(5) Emissions when the RCOs are being utilized during all times of "normal operation" and during times of "Energy Cell Only Mode" as defined under 4.1.3. contribute toward the annual emission limits given under footnote (6) as applicable.~~

~~(6)~~(4) The hourly emission limits are applicable when the Biofilter is being utilized during all times of "normal operation" and during times of "Energy Cell Only Mode" as defined under 4.1.3. The annual Emission Limits also include contributions made during RCDME events.

Compliance with the hourly PM_{10} emission limits for emission points 3, 4, 5, 6, 7, 9, 21, 23, 24, 40, 41, 42, 43, 44, and 45 shall streamline compliance with the less stringent hourly particulate matter emission limits of 45CSR§7-4.1. Compliance with the hourly PM_{10} emission limit for emission points 10 and 11 shall streamline compliance with the less stringent 45CSR§2-4.1.b hourly particulate matter emission limit. Compliance with the hourly SO_2 emission limit for emission points 10 and 11 shall streamline compliance with the less stringent 45CSR§10-3.3.f hourly SO_2 emission limit.
[45CSR13, R13-1761, 4.1.2, 4.1.13, 4.1.14, and 4.1.15; 45CSR§7-4.1; 45CSR§2-4.1.b; 45CSR§10-3.3.f]

4.1.3. For the purposes of this permit, the following operating scenarios are defined:

a. "Normal operation" shall mean those times when:

~~1. The Energy Cells are in operation, material is being dried in the dryers, gases are vented through the operating WESPs and RCOs, and emitted from Emission Point 21.; or~~

~~2.~~ The Energy Cells are in operation, material is being dried in the dryers, gases are vented through the operating WESPs and Biofilter, and emitted from Emission Point 23.

b. "Idle Run Mode" shall be defined as those times when the Energy Cells are operating, no material is being dried in the dryers, gases are vented through the operating Multi-clones, and emitted from Emission Points 10 and 11.

c. "Energy Cell Only Mode" shall be defined as those times when the Energy Cells are operating, no material is being dried in the dryers, gases are vented through the operating WESPs, and emitted from Emission Point 21.

d. "RCDME" shall be defined as those times when the Energy Cells are operating, material is being dried in the dryers, gases are vented through the operating WESPs, and emitted from Emission Point 21.

[45CSR13, R13-1761, 4.1.3]

4.1.4. Operation of the Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10) shall be in accordance with the following requirements:

a. The permitted facility shall burn only hogged wood as the primary fuel or natural gas as the backup fuel to fire the Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10). Alternative fuels may be used only after receiving prior written approval from the Director;

b. During Idle Run Mode, Energy Cells shall be limited to a combined total of 2,800 hours of operation on a consecutive 12-month period; and

c. During Idle Run Mode, the combined heat input rate to Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10) shall be limited to 40 MMBTU/hr. Additionally, the maximum heat input rate to each individual energy cell shall be less than 30 MMBTU/hr.

[45CSR13, R13-1761, 4.1.4]

4.1.5. The auxiliary natural gas burners, designated as 3816-00-11 and 3916-00-11, (associated with the Energy Cells), shall not exceed a maximum design heat input of 29 MMBTU/hr per unit.
[45CSR13, R13-1761, 4.1.5]

4.1.6. Pursuant to 40 CFR 63, Subpart DDDD, operation of the facility under the Routine Control Device Maintenance Exemption (RCDME) shall be according to the following requirements:

a. For each process unit, a maximum of 3% of its actual annual operating hours may be during periods when its controlling ~~RCO or~~ Biofilter is offline for routine maintenance. This exemption applies to each dryer (1-4) and the press. ~~Additionally, since the press is controlled by both the RCOs or Biofilter, any time it operates while either RCO or Biofilter is offline for routine maintenance, shall be counted fully towards its 3% limit;~~

b. Reserved. ~~In order to minimize emissions, the facility shall not process any pine during any time when either of the RCOs is offline for routine maintenance and the press and/or any of the dryers (1-4) which are controlled by the offline RCO continues to operate;~~

c. As a minimization strategy, the facility shall to the greatest extent practically possible perform routine maintenance during periods when the press and dryers are already offline (not producing product) for maintenance or other reasons;

d. Reserved. ~~As a minimization strategy, the facility shall to the greatest extent practically possible take only one RCO offline at a time for routine maintenance, continuing the normal operation of the other RCO so long as the process units which it controls are operating;~~

e. Reserved. ~~The permittee shall follow the Standard Operating Procedure submitted as Attachment T in permit application R13-1761G to prevent pine from being processed during periods of operation under the RCDME; and~~

f. After startup of the Biofilter, operation of the facility under the RCDME shall only occur after a new RCDME request specific to the Biofilter (submitted pursuant to the requirements of Subpart DDDD) is approved in writing by the Director.

[45CSR13, R13-1761, 4.1.6, 45CSR34, 40 C.F.R.§63.2251]

4.1.7. The permitted facility shall route the press vent exhaust fumes into the Energy Cells and Dryers during normal operations. At times when the press is processing wood materials, the facility will be allowed to exhaust press vent fumes directly to the atmosphere through a press Bypass Stack (emission point 24) for a maximum of 500 hours per consecutive 12 month period. When the presses are not processing wood, the press vent fumes may be exhausted directly to the atmosphere through the press Bypass Stack for an unrestricted amount of time.

4.1.20. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
[45CSR13, R13-1761, 4.1.14; 45CSR§7-4.12]

4.1.21. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonable achievable.
[45CSR13, R13-1761, 4.1.14; 45CSR§7-5.1]

4.1.22. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.
[45CSR13, R13-1761, 4.1.14; 45CSR§7-5.2]

4.1.23. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR13, R13-1761, 4.1.14; 45CSR§7-9.1]

4.1.24. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations.
[45CSR13, R13-1761, 4.1.15; 45CSR§10-4.1, Emission Point ID (21 and 23)]

4.1.25. The owner or operator of a plant that discharges or may discharge a toxic air pollutant into the open air in excess of the amount shown in Table A of 45CSR27 shall employ BAT at all chemical processing units emitting the toxic air pollutant: Provided, that any source or equipment specially subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such regulation or standard.
[45CSR13, R13-1761, 4.1.16; 45CSR§27-3.1, Emission Point IDs (10, 11, 21, 23, 24)]

4.1.26. Reserved. ~~**40 C.F.R 63, Subpart DDDD Add-on Control Systems Compliance Options (RCOs).** Except for periods when the mill is operating under the RCDME or during times of SSM, the permittee shall, while using RCOs limit emissions of total HAP from emission point 21, measured as THC (as carbon) to 20 ppmvd. **[45CSR13, R13-1761, 4.1.17; 45CSR34; 40 C.F.R. §63.2240(b) and 40 C.F.R. 63, Subpart DDDD, Table 1B]**~~

4.1.27. Reserved. ~~**40 C.F.R 63, Subpart DDDD Operating Requirements (RCOs).** The permittee shall meet the following RCO operating requirements:~~

~~a. For a thermal oxidizer, maintain the 3-hour block average firebox temperature above the minimum temperature established during the performance test or maintain the 3-hour block average THC~~

~~concentration in the thermal oxidizer exhaust below the maximum concentration established during the performance test.~~

~~b. For a catalytic oxidizer, maintain the 3-hour block average catalytic oxidizer temperature above the minimum temperature established during the performance test; AND check the activity level of a representative sample of the catalyst at least every 12 months or maintain the 3-hour block average THC concentration in the catalytic oxidizer exhaust below the maximum concentration established during the performance test.~~

~~The operating limits summarized above were defined within the permittee's notification of compliance status report dated May 27, 2009 as well as a July 30, 2009 notification of compliance status addendum. Upon submittal of a notification of process change as specified within §63.2280(g)(3) and a subsequent finding of compliance made by the WVDAQ, the operating limits listed above may be revised as allowed under the Federal Regulation.~~

~~**[45CSR13, R13-1761, 4.1.18; 45CSR34; 40C.F.R.§63.2240(b) and 40 C.F.R. 63, Subpart DDDD, Table 2]**~~

4.1.28. The permittee shall develop a written SSM plan according to 40 C.F.R. §63.6(e)(3).
[45CSR13, R13-1761, 4.1.21; 45CSR34; 40 C.F.R. §63.2250(c)]

4.1.29. The permittee shall abide by the work practice standards associated with Group 1 miscellaneous coating operations by using non-HAP coatings as defined in 40CFR§63.2292.
[45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3]

4.1.30. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.1 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-1761, 4.1.22; 45CSR§13-5.1~~0~~1]

4.1.31. **40 CFR 63, Subpart DDDD Add-on Control Systems Compliance Options (Biofilter)**
Except for periods when the mill is operating under the RCDME or during times of SSM, the permittee shall, while using the Biofilter:

a. Limit emissions of total HAP, measured as THC (as carbon), to 20 ppmvd; or

b. Reduce methanol emissions by 90 percent; or

c. Reduce formaldehyde emissions by 90 percent.

[45CSR13, R13-1761, 4.1.19; 45CSR34; 40 C.F.R. §63.2240(b) and Table 1B of 40 CFR 63, Subpart DDDD]

4.1.32. **40 CFR 63, Subpart DDDD Operating Requirements (Biofilters)**
The permittee shall meet the following Biofilter operating requirements:

a. Maintain the 24-hour block Biofilter bed temperature within the range established according to §63.2262(m); or

b. Maintain the 24-hour block average THC concentration in the Biofilter exhaust below the maximum concentration established during the performance test.

[45CSR13, R13-1761, 4.1.20; 45CSR34; 40 C.F.R. §63.2240(b) and Table 2 of 40 CFR 63, Subpart DDDD]

4.2. Monitoring Requirements

4.2.1. For the purpose of determining compliance with the operating limits set forth in Section 4.1.4.b, of this permit, the permittee shall monitor and record the monthly and rolling twelve month total number of hours the Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10) operate in the idle run mode.
[45CSR13, R13-1761, 4.2.1]

4.2.2. For the purpose of determining compliance with the operating limits set forth in Section 4.1.7 of this permit, the permittee shall monitor and record the monthly and rolling twelve month total number of hours the press vent fumes are being exhausted directly to the atmosphere through the press Bypass Stack (Emission Point 24).
[45CSR13, R13-1761, 4.2.2]

4.2.3. For the purpose of determining compliance with the throughput limits set forth in Section 4.1.9.a through 4.1.9.c of this permit, the permittee shall monitor and record the monthly and twelve month rolling total throughput of phenol formaldehyde resin (liquid or powder) as measured on a solids basis, polymeric diphenylmethane diisocyanate (MDI), and wax.
[45CSR13, R13-1761, 4.2.3]

4.2.4. For the purpose of determining compliance with the production limit set forth in Section 4.1.9.d of this permit, the permittee shall monitor and record the monthly and rolling twelve month total of OSB (as adjusted to 3/8 inch) produced at the facility. Compliance with the hourly production limit shall be based on the average hourly production rate as calculated for each month.
[45CSR13, R13-1761, 4.2.4]

4.2.5. The permittee shall meet all applicable ~~RCO and~~ Biofilter monitoring requirements pursuant to 40 C.F.R. 63, Subpart DDDD. This shall include ~~continuous monitoring of the RCO operating temperatures, which shall be tabulated as a 3-hour block average consisting of evenly spaced readings, recorded in the previous 3 operating hours; and~~ Biofilter bed temperature monitoring or Biofilter outlet THC monitoring, determined as the 24-hour block average of all recorded readings, calculated after every 24 hours of operation as the average of the evenly spaced recorded readings in the previous 24 operating hours. For purpose of calculating data averages, you must not use data recorded during the events listed within 40 CFR §63.2270(b) and (c). Some of these events include malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, data recorded during periods of startup, shutdown, and malfunction; or data recorded during periods of control device downtime covered in any approved routine control device maintenance exemption.

Additionally, in accordance with 40 CFR §63.2270(f), to calculate the data averages for each 3-hour or 24-hour averaging period, you must have at least 75 percent of the required recorded readings for that period using only readings that are based on valid data.
[45CSR13, R13-1761, 4.2.5., 45CSR34, 40C.F.R.§63.2270]

4.2.9. The permittee shall continuously monitor the voltage of Wet ESP No. 1 (4110-00-10) and Wet ESP No. 2 (4120-00-10). The voltage on each Wet ESP shall be measured with a voltmeter having a minimum accuracy of ± 1 kV. At least semi-annually, each voltmeter shall be calibrated to confirm that it has a reading of zero when the Wet ESP is not operating. During normal operation, each Wet ESP shall have at least 2 fields in service and the voltage shall be maintained at or above 10 kV. If the voltage falls below 10 kV for 30 seconds, an alarm will sound and corrective action shall be taken to return the voltage to a value at or above 10 kV. **[45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), and 64.7(d)]**

4.2.10. The permittee shall monitor the pressure drop across the Dry Waste System Baghouse (4397-00-10) on a daily basis. The pressure drop shall be measured using a differential pressure gauge with a minimum accuracy of ±0.25 inches of H_2O. Pressure taps shall be located at the inlet and outlet to the baghouse. At least annually, the pressure gauge and the reader shall be calibrated according to manufacturer's recommendations. When the pressure drop is greater than 5 inches of H_2O or less than 0.2 inches of H_2O, the permittee shall conduct an inspection of the baghouse and corrective action shall be taken to return the pressure drop to an operating range of less than 5 inches and greater than 0.2 inches of H_2O. **[45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), and 64.7(d)]**

4.3. Testing Requirements

4.3.1. Performance testing shall be in accordance with the following:

a. At the same time as the initial performance test required under 40 C.F.R. 63, Subpart DDDD, the permittee shall conduct, or have conducted, a performance test during "normal mode" as defined under 4.1.3.a.~~2~~ to determine compliance at Emission Point 23 with the hourly emission limits of VOCs and the HAPs targeted by 40 CFR 63, Subpart DDDD;

b. Use of test methods shall be in accordance, where applicable, with 40 CFR 63, Subpart DDDD or in accordance with information contained in an approved test protocol; and

c. Any required performance test shall be in accordance with 3.3.1.

[45CSR13, R13-1761, 4.3.1]

4.3.2. The permittee shall meet all applicable ~~RCO and~~ Biofilter testing requirements pursuant to 40 C.F.R. 63, Subpart DDDD. This shall include ~~annual catalyst activity testing in accordance with 40 CFR 63 Table 2 Row (2) and Table 7 Row (4) and~~ the repeat Biofilter performance testing as specified in 40 C.F.R. 63 Subpart DDDD Table 7 Row (3) as well as any additional confirmatory testing determined necessary by the Director. **[45CSR13, R13-1761, 4.3.2., ~~and 4.1.18.b,~~ 45CSR34, 40 C.F.R. §63.2271(a), 40 C.F.R. 63, subpart DDDD, ~~Table 2 Row (2),~~ Table 7 rows (3) ~~and (4)~~, 45CSR§30-5.1.c.]**

4.3.3. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of 45CSR§2-4. Such tests shall be conducted in accordance with the appropriate method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director. The Director or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. Sufficient information on temperatures, velocities, pressures, weights and dimensional

values shall be reported to the Director, with such necessary commentary as he may require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained. **[45CSR13, R13-1761, 4.1.13; 45CSR§§2-8.1.b and 8.1.b.1]**

4.3.4. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. **[45CSR13, R13-1761, 4.1.14; 45CSR§7-8.1]**

4.3.5. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions. **[45CSR13, R13-1761, 4.1.14; 45CSR§7-8.2]**

~~4.3.6. In order to confirm compliance with 40 C.F.R. 63, subpart DDDD and permitted VOC limits, the permittee shall conduct confirmatory testing of emission point ID 21 at least once per Title V permit term in order to correlate catalyst activity levels and operating temperatures with THC (as carbon) concentrations and Wood Product Protocol 1 (WPP1) VOC emissions. [45CSR§30-5.1.c.1.B. and 45CSR§30-5.3]~~

4.4. Recordkeeping Requirements

4.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.1, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. **[45CSR13, R13-1761, 4.4.2]**

4.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.1, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-1761, 4.4.3]

4.4.3. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. The permittee shall also maintain records of the date and time of start-up and shutdown; and a quarterly ash and BTU analysis of the wood combusted. (10, 11)
The 40 C.F.R. §60.48c(g) requirement to maintain records of the quantity of each fuel combusted on a daily basis was streamlined with the less stringent 45CSR§2A-7.1.a.1 requirement to maintain records of the quantity of natural gas consumed on a monthly bases.
[45CSR13, R13-1761, 4.4.9 and 4.1.13; 40 C.F.R. §60.48c(g); 45CSR16; 45CSR§2-8.3.c; 45CSR§§2A-7.1.a.1 and 7.1.a.3]

4.4.4. The permittee shall meet all applicable record-keeping requirements pursuant to 40 C.F.R. 63, Subpart DDDD. These records shall include the following:

a. Reserved. ~~Maintaining records of continuous firebox/combustion chamber temperatures on each of the oxidizers.~~

b. Reserved. ~~Catalytic activity measurements shall be recorded annually and maintained in accordance with 40 C.F.R. §63.2282(e)~~

c. Maintain records of all Group 1 coatings to assure the use of non-HAP coatings.

d. Records of performance tests and performance evaluations.
[45CSR13, R13-1761, 4.4.10, 45CSR34, 40 C.F.R. §63.2282, 40 C.F.R. 63, Subpart DDDD, Tables 7 and 8.]

4.4.5. The permittee shall maintain records of all monitoring data required by Sections 4.2.6 and 4.2.7 documenting the date and time of each visible emission check, the emission point or equipment identification number, the name or means of identification of the responsible observer, the results of the check, and, if necessary, all corrective actions taken. Should a visible emission observation be required to be performed per the requirements specified in 40 C.F.R. 60, Appendix A, Method 9 or 45CSR7A, the data records of each observation shall be maintained per the requirements of 40 C.F.R. 60, Appendix A, Method 9 or 45CSR7A. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (OOS) or equivalent.
[45CSR§30-5.1.c]

4.4.6. The permittee shall monitor all fugitive particulate emission sources as required by 4.1.13 and 4.1.21 to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained stating the types of fugitive particulate capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.
[45CSR§30-5.1.c]

4.4.7. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by 4.1.22 applied at the facility.

[45CSR§30-5.1.c]

4.4.8. The permittee shall maintain records of all monitoring data required by Section 4.2.8 documenting the date and time of each visual inspection, the emission point or equipment identification number, the name or means of identification of the responsible observer, the results of the inspection, and if necessary, all corrective actions taken. For any maintenance conducted on the control devices, records shall be maintained in accordance with 4.4.1.
[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

4.4.9. The voltage measured across Wet ESP No. 1 (4110-00-10) and Wet ESP No. 2 (4120-00-10) shall be recorded as a 6-minute average and records shall be maintained in accordance with 3.4.1. In addition to records of voltage, the permittee shall document and maintain records of all periods during normal operation (non-SSM) when the voltage is less than 10 kV for more than 30 seconds and any corrective actions taken during these periods. Maintenance and malfunction records for Wet ESP No. 1 and Wet ESP No. 2 shall be maintained in accordance with 4.4.1 and 4.4.2.
[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

4.4.10. The pressure drop across the Dry Waste System Baghouse (4397-00-10) shall be recorded daily. For any excursions when the pressure drop is greater than 5 inches of H_2O or less than 0.2 inches of H_2O, the permittee shall maintain records of the date and length of time of the occurrence and of the corrective actions taken. Maintenance and malfunction records for the Dry Waste System Baghouse shall be maintained in accordance with 4.4.1 and 4.4.2.
[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

4.4.11. For Compliance Assurance Monitoring (CAM), the owner or operator shall comply with the recordkeeping requirements of permit conditions 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. 64 (such as data used to document the adequacy of monitoring, or records of monitoring, maintenance, or corrective actions). *(Wet ESP No. 1 {4110-00-10}, Wet ESP No. 2 {4120-00-10}, and Dry Waste System Baghouse {4397-00-10})*
[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

4.4.12. For the purpose of determining compliance with 4.1.6.a., the permittee shall keep a daily record of any start-up, any shut-down, total hours operated and hours operated while the unit's controlling ~~RCO or~~ Biofilter is offline for routine control device maintenance. And, as regards the ~~RCOs and~~ Biofilter, the permittee shall keep daily records of any start-up, any shut-down, total hours operated and total hours off-line for routine maintenance.
[45CSR13, R13-1761, 4.4.7]

~~4.4.13. For the purpose of determining compliance with 4.1.6.b., the permittee shall keep records which indicate how much, if any, pine is processed during any period of routine RCO maintenance.~~
~~**[45CSR13, R13-1761, 4.4.8]**~~

4.5. Reporting Requirements

4.5.1. For CAM, monitoring reports shall be submitted to the Director and at a minimum shall include and be in accordance with information in permit conditions 3.5.6 and 3.5.8, as applicable. Also, at a minimum, the following information, as applicable, shall be included:

a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(Wet ESP No. 1 {4110-00-10}, Wet ESP No. 2 {4120-00-10}, and Dry Waste System Baghouse {4397-00-10}) **[45CSR§30-5.1.c; 40 C.F.R. §64.9(a)]**

4.5.2. The permittee shall meet all applicable reporting requirements pursuant to 40 C.F.R. 63, Subpart –DDDD, Table 9 and Table 10. This includes semiannual compliance reports, which contain the information described within 40 CFR §63.2281(c)-(f). The semiannual reports may coincide with title V semiannual reporting in accordance with 40 CFR §63.2281(b)(5) and (g) where applicable.
[45CSR13, R13-1761, 4.5.1., 45CSR34, 40 C.F.R.§§63.2281(a) and (b)]

4.5.3. The permittee shall submit all startup, shutdown, and malfunction (SSM) notifications and semiannual reports in accordance with 40 CFR §63.6(e)(3) and §63.10(d)(5).
[45CSR34, 40 C.F.R.§63.2290]

~~4.5.4. In order to document compliance with the subsequent compliance testing requirement of 4.3.6, the permittee shall submit all stack test reports to the Director within 60 days of completing the testing event.~~
~~**[45CSR§30-5.1.c]**~~

4.6. Compliance Plan

4.6.1. None.